

The Pyongyang Times

Democratic People's Republic of Korea

No. 33 (3 069) weekly <http://www.pyongyangtimes.com.kp> e-mail: flph@star-co.net.kp Sat, August 17, Juche 108(2019)

Supreme Leader Kim Jong Un oversees test-fire of latest weapon system

Kim Jong Un, chairman of the Workers' Party of Korea, chairman of the State Affairs Commission of the DPRK and supreme commander of the armed forces of the DPRK, directed the test fire of a new weapon on August 10.

The defence scientists and workers in the munitions industry completed another new weapon system, whose orientation of research and development were indicated by the Party recently, and presented a proud report to the Party Central Committee.

After receiving the report on the development of the new weapon, the Supreme Leader gave an instruction to test it immediately.

He looked round the new weapon at the launching site.

Saying that the new weapon, which was developed to suit the terrain conditions of the country and meet the requirements of the Juche-based art of war, has advantageous tactical characters different from the existing

weapon systems, he explained the strategic and tactical intention of the Party Central Committee which assigned the task to develop the weapon system to the defence science sector.

He mounted the observation post and oversaw the test fire.

As he gave an order to fire, the powerful projectiles spewed out the flash of dazzling light as if to signal

the birth of a new Juche weapon.

The detailed analysis of the test fire result proved that the demand of the design of the new weapon system that is advantageous and powerful was perfectly met.

After seeing the test fire result of the new weapon transmitted to the display at the observation post, the Supreme Leader was very pleased and expressed great satisfaction with

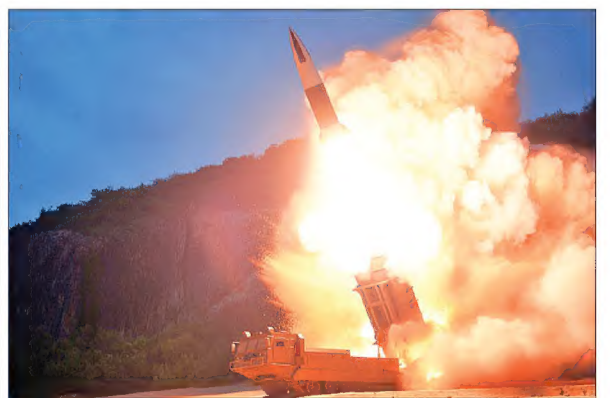
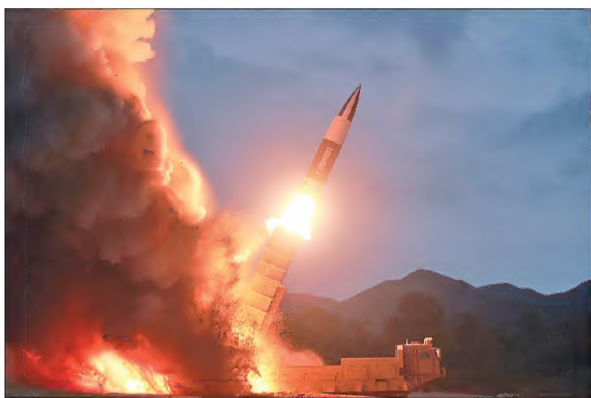
the fact that another new weapon intended by the Party has come into being.

Our defence scientists and munitions industry workers do everything when the Party gives the direction, he said, calling them, who grasp the strategic plan and intention of the Party Central Committee and carry them out more correctly than others, comrades to whom he was really grateful for always relieving him of heavy burden and helping him forget difficulties and hardships.

He said that the heroic and patriotic feats of the defence scientists and working

class in the munitions industry, who work hard to steadily build up the defence capability of the country true to the Party's strategy for developing the defence industry with boundless loyalty to the Party and the revolution and the noblest sense of patriotism, will be recorded forever along with the history of the struggle of the WPK.

Compiled from KCNA



LEAD

Saviour bringing nation from shadow into rebirth

On August 15 1945 the Korean nation was liberated from the Japanese military occupation.

During their 40-odd year rule over Korea, the Japanese imperialists turned the whole of Korea into a prison, killed more than a million Koreans, forcibly drafted over 8.4 million people and reduced 200 000 women into sex slaves. Such a history of national sufferings came to an end that day.

Legendary hero Kim Il Sung rescued the destiny of the nation and brought glory to the country which had long suffered an eclipse on the world map.

He declared a full-scale showdown with the imperialists by forming the Down-with-Imperialism Union and organized a new-type revolutionary armed force to wage the great anti-Japanese war.

What he trusted and relied on in the period of the arduous and fierce anti-Japanese war were broad masses of the people. He turned the guerrilla army into the people's army and destroyed the enemy's numerical and technical superiority with adroit and original strategic and tactical one. He founded and strengthened the Association for the Restoration of the Fatherland, which

displayed great vitality in accomplishing the cause of national liberation.

Korea could emerge victorious in the showdown with the Japanese imperialists even in the inferior condition with neither the backing of the state nor assistance of the regular army.

Kim Il Sung built a people's country in liberated Korea.

A typical example is the agrarian reform which was enforced first by the Provisional People's Committee of North Korea just after liberation.

According to the principle that people should be the masters of the country and everything serve them, major industries were nationalized and sex equality and other reforms successfully

enforced in the wake of the agrarian reform.

Afterwards, Kim Il Sung advanced the idea of building an independent, self-supporting and self-defensive state and ensured independence in politics, self-sufficiency in the economy and self-reliance in defence, thereby developing the country into a dignified and powerful people-centred socialist state.

The Korean people praise him as the benefactor of national rebirth and prosperity through generations as he left great bequests for the prosperity of all generations to come by dedicating his all to the people's freedom and well-being.

By Kim Rye Yong PT



The photo shows Korean people celebrating the country's liberation on August 15 1945.

ANNIVERSARY

Nation celebrates liberation anniversary

The Korean people across the country paid tribute to President Kim Il Sung and Chairman Kim Jong Il to mark the 74th anniversary of the country's liberation on August 15.

An endless stream of visitors flowed to Mansu Hill in

Pyongyang where the statues of the President and the Chairman stand with profound reverence for the great leaders who had achieved the historic cause of national liberation by leading the arduous anti-Japanese war to victory and built eternal

foundations for the victory of the socialist cause and the eternal prosperity of the country.

A basket of flowers sent by Supreme Leader Kim Jong Un was seen standing in front of the statues.

Baskets of flowers and bouquets were laid at their statues in the name of Party, military and government organs, social organizations, ministries and national agencies, army units and institutions, enterprises, factories and schools at all levels in Pyongyang.

A basket of flowers was also laid in the name of the Pyongyang mission of the Anti-imperialist National Democratic Front.

The home-visiting delegation of the Korean young businessmen's association in Kyushu, Japan, headed by its president Pak Yun Ho visited the statues of the great leaders



A performance is given at the East Pyongyang Grand Theatre to mark the 74th anniversary of the country's liberation.

REMINISCENCES

Kim Il Sung recalled by his comrades-in-arms

The anti-Japanese guerrillas were deeply attracted by Kim Il Sung as they crossed long miles of raging blizzards and bloody battles together with him. Here are some of their reminiscences:

First unforgettable meeting

I met Commander Kim Il Sung for the first time in September 1933.

Since he set out on the road of anti-Japanese revolution in his early years, he put forward correct revolutionary lines as he foresaw the distant future of the Korean revolution as its outstanding leader.

His leadership was always the banner of our struggle and the path he indicated was always the road of victory and glory.

The first meeting lasted only two days, but it was a significant period which was more valuable than finishing years of revolutionary university.

Since then on, I have kept his instructions in my mind and steadily followed the road of arduous revolutionary struggle with the honour and pride of having held him in high esteem as the leader of the Korean revolution.

Choe Hyon

Tactic of long miles at a run

During the anti-Japanese armed struggle in Mt Paektu I witnessed time and again Commander Kim Il Sung employing protean tactics with a superb art of command. Especially, I'll never forget the tactic of "one thousand miles at a run" he employed in China's Xiaotanghe in March 1937.

Amid a fierce offensive and defensive battle, darkness fell. In the pitch dark night, enemies built thousands of campfires around the elevation we were positioned on. This showed that a large group of "punitive" forces was encircling us ring upon ring.

All of us men of the Korean People's Revolutionary Army were stiffened with apprehension, but the Commander ordered us to glide noiselessly towards a

highway, avoiding the enemy's campfires within the night.

That night our unit slipped away from Xiaotanghe and marched for over 40 kilometres along the highway without meeting any resistance.

This tactic was also adopted during the battle of the Musan area in May 1939.

At the time a KPRA unit led by Kim Il Sung marched in the daytime along the road, which the enemy had built to prevent the KPRA from advancing to the homeland by allocating a special budget. The road had just been finished and kept clear for inspection. When the enemy found it out later, they groaned in despair, dubbing this bold move an "unprecedented oddity".

Ri Pong Rok

A cup of parched-rice flour

Whenever I remember the Arduous March that started in the winter of 1938, the story of a cup of parched-rice flour still touches my heart.

The food problem of our unit got more serious as the days went by. Several days passed since we had managed to sustain ourselves with a meagre meal of some raw corn seeds and dried radish leaves. As we went without food altogether, we felt dizzy for hunger and fell, but lifted ourselves heavily as we ate snow and walked on.

One morning during the march, the orderlies of the headquarters offered Commander Kim Il Sung a cup of parched-rice flour they had kept as emergency ration for him. But he did not take it as he surmised that it was the last remaining food. He sat them around him and shared it with them, saying they would feel full if they ate it regarding that as a large amount of food.

After all, he got the smallest portion. Only after he saw others put the flour into water, he also did so.

The cup of parched-rice flour reflected his spirit of serving the country self-sacrificingly and also his warm love for his men.

Pack Hak Rim

on Mansu Hill on August 15 to pay homage to them.

The statues of the great leaders and portraits of their beaming images across the country were also crowded with visitors who came to pay floral tribute to them.

Artistic performances were given at theatres in Pyongyang and localities on August 15 to

celebrate the 74th anniversary of the country's liberation.

They were also given in the provinces, fully demonstrating the iron faith and will of the Korean people to add glory to the immortal revolutionary feats of the great leaders and build a powerful socialist country.

Compiled from KCNA

METAL

Self-reliant production processes consolidated

Projects are now under way to upgrade Juche-oriented production processes and normalize production in the metal industry.

The Kim Chaek Iron and Steel Complex has employed a rational method of running the oxygen blast furnace to meet the supply conditions of various raw materials and fuel for the normal operation of the furnace, while technically remodelling the oxygen separator to increase the production of oxygen. Preparations are being made to

build an additional oxygen blast furnace and oxygen separator and technical upgrading projects undertaken to increase iron and steel production and improve their quality.

The Hwanghae Iron and Steel Complex pushes ahead with the project to put the operation of the oxygen blast furnace and 20 ton-capacity oxygen converter on a scientific footing. Its technical staff applied various desulphurization methods to iron- and steel-making

processes to reduce the content of sulphur and improve the quality of iron and steel.

The Posan Iron Works and the Chongjin Steel Works are now focusing on establishing a production process aimed at reducing coal consumption while increasing production.

The Musan Mining Complex steps up efforts to produce more iron ore to be supplied to production units by introducing efficient mining methods.

A project to expand the electrode production capacity is in full swing at the final stage at the Hungnam Electrode Factory. After building the electrode kiln earlier than scheduled, the technical personnel of the factory are now working on remodelling the cover of the furnace to drastically reduce heat loss.

The Hungsan Mine has already carried out a capacity expansion project to increase the production of graphite.

Similar projects are under way to consolidate the production foundations at the Jangsan and Ramjong mines.



RI CHUNG SONG / RODONG SINMUN

A worker processes a wheel at the Kim Jong Thae Electric Locomotive Complex.

By Jong Hwa Sun PT

POWER

Hundreds of innovation ideas adopted to increase production

The electric power industry sector is going on with the mass technical innovation drive.

According to information available, power stations and provincial power distribution stations have created and introduced hundreds of technical innovation plans conducive to electricity production and management this year.

The Pyongyang Thermal Power Complex applied dozens of such plans to boiler No. 9 to improve its efficiency

remarkably and made quality insulating bricks with white slag to use them in overhauls and medium-scale repairs.

The Suncheon Thermal Power Station has successfully introduced heavy oil-free firing and combustion stabilization technologies.

The Hochongang Power Station designed several technical innovation plans in the course of replacing water turbines, refashioning turbine blades and repairing power

generating equipment, while the Suphung Power Station speeded up the maintenance and repairs of structures, turbine generators and other power generating facilities.

The Ryongsan Youth Power Station has ensured the stability of generators by upgrading the exciter control device while reducing the self-consumption of electricity.

The Sodusu, Puryong and other hydropower plants in North Hamgyong Province keep abreast of all conditions for power generation.

The Pyongyang municipal and South Hamgyong provincial power distribution stations are striving to remodel power grids into power-saving ones and perfect the integrated power management system.

The electric power industry institute, the electric power informatics institute and other relevant research units are strengthening cooperation with the State Academy of Sciences and other research institutions to promptly introduce latest sci-tech hits.



HONG KWANG NAM / PICTORIAL KOREA

Workers monitor power generation at the general control room of the Pukchang Thermal Power Complex.

By Yun Kyong Il PT

SCI-TECH

Committees play part in developing local industry

Committees of science and technology in North Hamgyong and North Phyongan provinces are channelling primary efforts into resolving sci-tech problems arising in developing the provincial economy and improving the people's livelihood.

The North Hamgyong Provincial Committee of Science and Technology set over a dozen major research targets for building up the self-development capacity of the province and dispatched research teams to important production units.

The scientists, who were sent to the construction site of the Orangchon Power Station, helped increase the frequency of daily blasting by introducing a technology that meets rock conditions in relevant areas into the tunnelling of waterway and dam construction, so as to speed up tunnelling.

A research group who went to the construction site of a seed catfish farm contributed to completing its integrated control system with less costs

by working out a design for optimum system.

Other scientists rounded off research into an iron production technology based on raw materials substituting for scrap iron and researched and introduced a cement production technology based on soot from thermal power stations.

The North Phyongan Provincial Committee of Science and Technology is alleviating the shortage of electricity by harnessing different energy resources.

It pushes an undertaking for applying the power generation technology based on coal gasification. Six units install 50 kW-capacity coal gas power generators in the first half of the year.

The committee also introduced non-magnetizing alternating-current contactors into many production units that consume much electricity and is organizing work scrupulously to utilize methane gas as a substitute for fuel.

By Ri Myong Jun PT

INSPECTION

Premier visits steel and glass giants

Premier Kim Jae Ryong visited the Chollima Steel Complex and the Taeon Friendship Glass Factory in Nampho.

Looking round several workshops at the Chollima Steel Complex, Kim Jae Ryong, who is also member of the Political Bureau of the Central Committee of the Workers' Party of Korea and member of the State Affairs Commission of the DPRK, underscored the need to properly work out the management strategy and conduct business activities in an active and creative way as required by the socialist enterprise responsibility and management system, so as to

contribute to putting the metal industry on a Juche and modern basis and further improve the supply service for workers.

At the Taeon Friendship Glass Factory, he called for introducing sci-tech hits into production to lower the production cost as much as possible and for positively recycling waste.

The field consultative meetings discussed measures to ensure timely supply of raw materials and fuel necessary for iron and steel production by relevant units and diversify products.

Compiled from KCNA



Premier Kim Jae Ryong (foreground right) on his tour of the Taeon Friendship Glass Factory.

VIEW

Researcher bullish about graphite industry

The DPRK's graphite industry has a bright prospect for its development as it has abundant resources, a long history and scientific and technical potentials.

The country takes a leading position in the world in both deposits and quality of graphite. Graphite ores are mostly amorphous and flaky and their deposits are found in Janggang County of Jagang Province, Kim Chaek City of North Hamgyong Province, Kaechon City of South Phyongan Province, Kumya County of South Hamgyong Province and other places.

The country has paid attention to the development of the graphite industry under a far-reaching programme and achieved notable successes in recent years.

First of all, it leads the world in the field of graphite brush.

Generally, brush which is used for electric motors or generators must have three properties to fully perform its mission: low density, good electric conductivity and high solidity. At present, several countries are using brush made of copper or other metals or artificial graphite, not natural graphite. The annual consumption of these brushes amounts to tens of billions, but they cost high and are known to be a cause of environmental pollution.

The Korean scientists and technicians developed a natural graphite brush by inventing a special binder and laid a scientific and technical foundation for mass-producing it.

The introduction of this brush in the DPRK and other countries fully proved that its physicochemical and mechanical properties are far better than those of metal or artificial graphite brushes. Users say that the natural graphite brush has no sparks and works for more than 10 years, so it is absolutely superior to others in the management and economic aspects.

The International Electrotechnical Commission (IEC) officially announced that the DPRK's natural graphite brush material is 7% lower in density, but 28% higher in electric conductivity and 1.5 times harder than the brush material which has so far monopolized the world market and approved its international standard, IEC/TR63021.

The country has broken new ground in the production of graphite electrode.

Scientists broke the existing practice of making electrodes for UHP electric arc furnace from artificial graphite and established a new technology of producing them with natural graphite. They also made oil heater and pump, core parts in the production process of graphite electrode, with local materials and technology to ensure the regular production of graphite electrodes.

The Hwanghae Iron and Steel Complex succeeded in the operation of UHP electric arc furnace by using natural graphite electrodes at one try, putting an end to the use of imported electrodes and making a breakthrough in full introduction of local ones.

High-purity graphite badly needed for the production of graphite goods has also been developed.

The researchers of the Tanchon Mining Institute made 99.95% high-purity graphite from concentrated graphite ore produced at the Kwangchon Mine. It showed that various quality processed graphite products like natural graphite brush can be made from the concentrated graphite ore of the mine.

And a new natural graphite electric motor brush production process has been set up.

The DPRK will make every endeavour to gain the competitive edge of its graphite industry in the world market.

Pak Song Chol, *section chief of the Economy Institute of the Academy of Social Sciences*

PROFILE

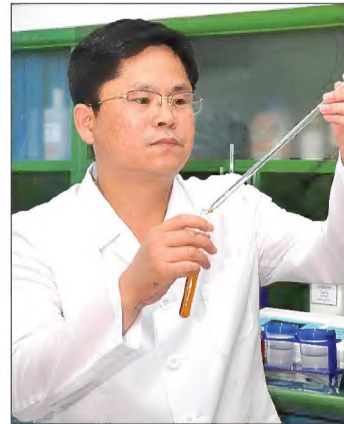
Scientist helps modernize facilities with local sensors

"Every unit is pressing on with the establishment of an integrated manufacturing system. Here the introduction of locally-made sensor can be said to be the kernel. Apart from homemade sensors, we cannot say we have fully modernized production processes in our own way," said an official of the State Commission of Science and Technology.

Kim Kum Chol, who graduated from the Electronics Faculty of Kim Chaek University of Technology, was getting practical training as a postgraduate student of the university at the Tanchon Smeltery several years ago. At the time he developed a sensor with locally abundant raw materials and on this basis made a pH meter that helps increase yield and prevent accident in production processes.

His research finding promptly drew the interest of academic circles and the university took the measure of setting up a sensor lab led by him.

He directed the research group, which was formed with persons of ability in their 20s and 30s, to push ahead with the domestic production of sensors.



They established a serial production line of sensors and developed a pH sensor, which can be widely used not only in machine-building and chemical industries but also in families, to replace imported ones.

He then set to developing a water quality analyser for industrial use.

The advanced equipment analyses the pH, dissolved oxygen and all kinds of ions in water in real time and it is in great demand in fish farming, food and pharmaceutical industries and smeltery as well.

To unveil this equipment, the developers researched the composition and structure of sensor membrane, which is essential in real time analysis,

made its general design and manufactured it.

"The water quality analyser has been introduced into 80 percent of the country's fish farming sector, including Kujang and Poman fish farms, to contribute to scientific, modern and intensive fish farming," said an official of the Ministry of Fisheries.

They also developed a harmful gas analyser and dust-free environment measuring device.

Various sensors they developed have highly been appreciated at different sci-tech festivals, exhibitions and presentations and win favour with users.

Kim Kum Chol obtained several national patents and certificates of invention and recently got a doctorate in engineering.

He continues to work on the research into the domestic production of expensive analysers, while writing essays for the world's prestigious scientific journal.

"Our target is the modernization purely of our own," said Kim.

By Kim Ryong Jin PT

in brief

According to information available, factories under the Ministry of Electronics Industry overfulfil highly set production assignments every day by stoking the flames of the campaign to create the Mallima speed.

The Pyongyang Automation Appliances Factory is making innovations in the production of various kinds of electrical appliances for the Samjiyon County renovation and major construction projects.

The Saenal Electrical Appliances Factory fulfils its assignments for the production of enamel copper wire and small motors for trolley bus

production as it manages equipment and technology in a responsible way.

The Pyongyang Lighting Appliances Factory steadily pushes ahead with an undertaking for building a comprehensive light bulb production process while increasing the output of new products.

The Taedonggang Television Factory turns out quality electronic goods and daily electrical necessities such as speaker and connector by giving definite priority to the production of parts.

The Moranbong Automation Appliances Factory is conducting a brisk technical innovation drive to establish a process for producing measuring equipment in a short time, while the Taesong Electronic

Appliances Factory develops new products.

The Taean Friendship Glass Factory is stepping up the modernization of overall production processes while ensuring the domestic production of major equipment and raw and other materials based on its technicians.

It built an automatic curved glass furnace to improve the quality of curved glass and increase production capacity remarkably.

In the course of briskly conducting a technical innovation campaign to diversify products and improve their quality, tempered glass and some others were registered as February 2 Products.

Thanks to the mass technical innovation drive, its daily production capacity increased by more than 10 percent.

Ore dressers made accessories for magnetic separator, classifier and other equipment by themselves to sort out sand in a qualitative way.

The raw material suppliers, who improved the qualitative indexes of glass by introducing a method of removing iron based on permanent magnet, overfulfil their plans every day while ensuring the combination and supply of different raw materials as required by technical regulations.

By Kim Kum Myong PT

SHOW

Rason hosts 9th intl trade fair

The 9th Rason International Trade Fair opened with due ceremony on August 12.

It drew 110 units from several countries including the DPRK, China, Russia and Germany, which exhibited building materials, light industry goods, foods, daily necessities, medicines and others.

The ceremony was attended by officials concerned, local people, exhibitors, Chongjin-based consul generals of China and Russia, Chinese officials concerned and foreign businessmen in the Rason Economic and Trade Zone.

Compiled from KCNA

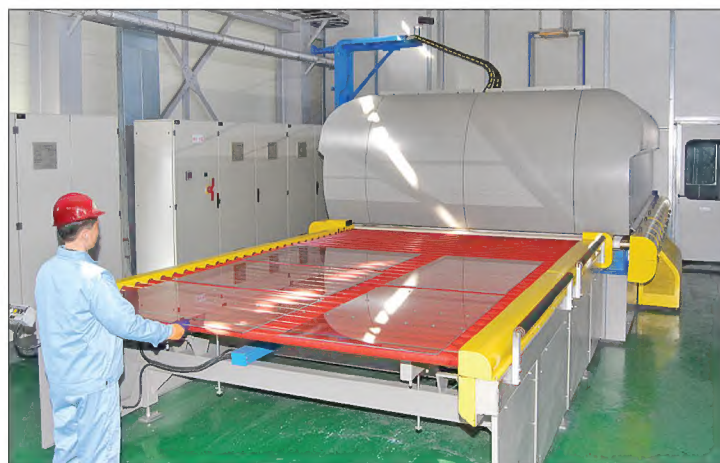


Plate glass rolls off the production line at the Taean Friendship Glass Factory.

RI MYONG GUK / PICTORIAL KOREA

EDUCATION

All are enthusiastic to be versed in science and technology

Hub of all-people learning

The Sci-Tech Complex on Ssuk Islet in the Taedong River is always jammed with visitors.

Built in the shape of a giant atom with a total floor space of over 106 600 square metres, the complex is a large-scale, comprehensive e-library where people can study to their heart's content and a hub of latest technology distribution as well.

It keeps a huge stock of the world's advanced sci-tech data and is capable of catering for over 7 000 subscribers at the same time and more than 50 000 people a day.

It is equipped with reading rooms for people from different backgrounds including experts, students and persons with disabilities and video can be watched in such rooms. It also has the virtual science lab, applied sci-tech hall, scientific search hall and other indoor sci-tech exhibition areas for different sci-tech fields where exhibits can be operated, controlled and felt.

The children's dream hall is an excellent combination of scientific world and juvenile mind, which is divided into such sections as "fountain of wisdom", "nature exploration", "stage of scientific activities" and "intellectual development classroom".

In the hall, children learn the principles of science by themselves through a virtual travel to the moon, flight simulation and word and jigsaw puzzles.

Outside the complex are areas for future energy and scientific games and an outdoor study site.

It offers online courses across the country in real time.

It is now visited by 5 000 people a day on average and over 10 000 at the maximum and its website is visited by 30

to 40 thousand people every day, according to lecturer Kim Pok Sil.

There is a modern dormitory with 500 beds and different service amenities.

By Kwon Hyo Song PT

Online education updated in keeping with growing needs

The education system is constantly updated for online education courses in keeping with the rapidly growing number of students.

Kim Chaek University of Technology established an artificial intelligence education

management system, whereby the computer automatically assesses the abilities of students and presents necessary study contents to them. Modern mathematical methods have been applied to develop this system.

The university gets online students to email their study experiences so as to generalize them. It is now working to extend the online teaching system based on wi-fi.

Pyongyang Han Tok Su University of Light Industry has adopted a new form of sci-tech training course in which online students can discuss problems arising in the production and modernization in their units.

Competent lecturers and researchers teach the courses. They deal with sci-tech problems arising in upgrading production processes and improving goods quality, and latest sci-tech information and achievements made by industrial establishments, thereby contributing to the rapid integration of education, scientific research and production.

Pyongyang Jang Chol Gu University of Commerce Online provides effective practical training. It made videos for online education by applying advanced teaching techniques. It also set up an interactive online educational system so that students can receive guidance of lecturers in practical training at their units.

Lecturers and researchers of the online education faculty of Wonsan Jong Jun Thae University of Economics are successful in their efforts to improve the quality of education and educational conditions and environment.

The faculty updates teaching plans in the direction of making teaching contents practicable, comprehensive and modern, so that part-time students can develop their theoretical and practical abilities in a short time.

By Kim Rye Yong PT



Study-while-you-work system proves effective

In the DPRK, all the working people study while they work.

Sci-tech learning spaces at production units and factory, farm and fishermen's colleges offer good conditions for learning.

Learning spaces have been furnished in recent years at all institutions, industrial establishments and cooperative farms throughout the country.

They are linked with sci-

tech diffusion, research and education units, especially the Sci-Tech Complex, Grand People's Study House and Central Information Agency for Science and Technology.

Production units push ahead with an undertaking in a planned way to teach employees modern science and technology through the operation of sci-tech learning spaces.

Study groups have been

organized with workshops or workteams as a unit and competitions are held between them, kindling the public zeal for inventing and introducing more than one technology among employees.

"The employees' enthusiasm for learning and their technical skills have markedly increased through the operation of the sci-tech learning space," said Choe Song Hun, chief engineer of the Pyongyang Kim Jong Suk Silk Mill.

Thanks to the study-while-you-work system, workers of the Pyongyang Electric Cable Factory 326 introduced dozens of technical innovation plans in the

first half of this year. The cost-effective and high-performance pneumatic insulating and grounding box the technicians and workers made by conducting the mass technical innovation drive is winning growing popularity among different application units.

"In the past, I operated my machine by relying on operating manual and experience, but I have been running it with a full understanding of its operating principle since I started studying at the sci-tech learning space. Now I have confidence that I can also create a new thing," said Pak Chol Ho, worker at the Phyongsong Synthetic Leather

Factory.

Farmers also benefit from such learning spaces.

The Migok Cooperative Farm in Sariwon, North Hwanghae Province, does farming scientifically in the face of unfavourable weather conditions, in which high temperature and severe drought linger on, by relying on the data of Pyongyang Agricultural College of Kim Il Sung University, the Sci-Tech Complex and the Academy of Agricultural Science, thus increasing the number of high-yielding workteams, sub-workteams and farmers.

By Ri Sung Ik PT

PROFILE

Young woman solves problems to win heart

Son Su Ryon, aged 24, is a member of the three-revolution team at the Pyongyang Kim Jong Suk Silk Mill.

Her plan for refashioning an important part of the automatic silk reeling machine was highly appreciated at the recent 34th National Festival of Science and Technology for great economic efficiency and high generalization value.

After graduation two years ago, Son came to the factory as a member of the three-revolution team.

At that time the factory was compelled to frequently replace the plastic rollers with high wear rate as they spin on the axis and worse still the factory was dependent on imported rollers.

"Our factory has dozens of automatic silk reeling machines and each machine has 20 such rollers. It cost much to replace hundreds of pieces of parts. Moreover, production was greatly hindered as we had to stop the machines for replacement," recalled Rim Myong Chol, workshop manager.

Son took on the task and succeeded in refashioning



PANG UN JU / THE PYONGYANG TIMES
Son Su Ryon (left) discusses a technical problem with a silk reeler.

the roller so that the physical abrasion of the plastic body could be reduced to the minimum. As a result, the lifespan of the roller increased dozens of times.

She came up with many other novel ideas and helped the factory save much foreign currency and increase production.

"Though she majored in economic management, she could make such great achievements in a matter of two years for her exceptional ability, burning passion, perseverance and power of execution. She is now loved by all as the indispensable treasure of our factory," said chief engineer Choe In Chol.

By Ri Sung Ik PT

FOOD

Pyongyang cold noodles more refreshing and tasty in midsummer

The Okryu Restaurant in Pyongyang is one of the favourite haunts of diners at lunchtime.

"Traffic security men seem to be busier than the cooks of the restaurant. Lots of people come here as it is midsummer. We are doing our best to prevent traffic jam," said Jong Song Mun, a traffic security man.

According to usherette Kim Hye Yong, an average of over 5 000 people dine in the eatery between 12:00 and 14:30 every day.

Kim Jong Mo from Taebodong of Pothonggang District, Pyongyang, said: "Pyongyang cold noodles of the Okryu Restaurant are the best food that can be found nowhere else in the world. In these dog days I feel refreshed when I take a bowl of appetizing noodles."

To meet the growing public demand for the cold noodles, the restaurant built more buildings and increased the number of employees nearly five times more than in its initial days.

Pyongyang cold noodles have been noted for the unique flavour since olden times.

An old record says that cold noodles are prepared by putting

buckwheat noodles into radish and bok choy kimchi soup and placing slices of pork on them and Pyongyang cold noodles are best known.

To preserve the traditional smack of the dish, the restaurant organized dozens of technical consultative meetings and made hundreds of experiments, with the result that it has been able to keep alive the sourish, sweetish and sapid savour of Pyongyang cold noodles that are chewy with appropriate hardness. Appreciation of the food can be seen through more than 80

gold medals it has obtained at annual cooking festivals.

The Pyongyang cold noodles of the restaurant are a must dish at state banquets and enjoy worldwide fame.

"In our restaurant hundreds of state banquets have been held and Pyongyang cold noodles have won praise of heads of state of more than 50 countries, foreign political and public figures and many overseas Koreans," said Kwon Kyong Ok, staff member of the restaurant.

By Pang Un Ju PT



RYU KWANG HYOK / THE PYONGYANG TIMES
Diners have Pyongyang's iconic cold noodles at the Okryu Restaurant.

RESORT

Sandy beach packed with bathers as summer heat goes on

As sizzling summer heat lingers on for weeks in the country, an endless stream of buses flows to the bathing beaches of Ryongsupho in Kwail County, South Hwanghae Province, with people on board who want to cool their bodies in fresh sea water and sea breeze.

The four-kilometre-long sandy beach along the coast of the West Sea of Korea with the sound of waves of fresh water breaking on the shore, coloured tents and stalls lining up along the beach and sports and amusement facilities form a good harmony with the seascape,

presenting a picturesque beauty of the sea bathing resort.

The area is called thus as it has a rock in the shape of a dragon head and it looks like the shape of a dragon lying to drink water. It is covered with sand and gravel several hundred metres wide from the shore with a gentle slope, which is perfect for sea bathing.

"The landscape is beautiful and the water is very clear. These are the characteristics of the holiday resort. It tells many legends related to dragon as the name says. One of them says that in the waters off the beach there is a large hole that leads

to the Palace of Dragon, or Sea God, and clear water gushes out of it incessantly," says Ham Hyo Song, a beach attendant and lecturer at the Ryongsupho pleasure ground management station.

Holidaymakers enjoy themselves in the beach resort.

"The landscape is beautiful but more characteristic is that I can see the change of low and high tides with my own eyes," says Ko Yong Min, a resident in Wonsan, who has just dropped in at it on his way back home after touring Mt Kuwol.

Kim Hui Son, an old woman

living in Neighbourhood Unit No. 24 of Mujin-dong No. 1, Songyo District, Pyongyang, says she comes here every year. "As I have sea bathing breathing in sea air, I feel relaxed and refreshed. Camping in a tent with my family members is excellent. I feel 10 years younger," she adds.

Competitive games in the table tennis area, mini bowling alley and beach volleyball courts, enthusiastic rooters and laughter of spectators add to the lively atmosphere of the resort.

"Fierce volleyball games are good. But the thrill of

jumping into the water after match beggars description," says Sin Song Il, a student from Pyongyang University of Dramatic and Cinematic Arts.

As the sky is bathing in a glowing light of the setting sun, holidaymakers begin to sing and dance here and there and women are busy exhibiting their culinary skills outside the tents.

The resort is full of laughter and singing and visitors enjoy seafood grilling and rice gruel mixed with fish. "Seeing the visitors full of excitement and joy, we feel pride in our jobs. Visitors increase year on year and we have more to do. But all employees do their jobs pleasantly," says Ro Yong Hyon, head of the pleasure ground management station.

By Jong Tang Song PT



PAK CHANG BOK / THE PYONGYANG TIMES
The Ryongsupho bathing resort on the coast of the West Sea of Korea is crowded with bathers.

S. KOREA

Who is to blame for military tension?

Despite the warnings and objections at home and abroad, the south Korean authorities launched into joint military exercises with the US on August 5.

It is blatant neglect and open violation of the Panmunjom Declaration and the September Pyongyang Joint Declaration—agreements for establishing a lasting and durable peace regime on the Korean peninsula.

In the military agreement for implementing the Panmunjom Declaration, the north and south agreed to totally discontinue hostile acts of all kinds, the source of military tension and conflict, against each other in all spaces of the ground, sea and air.

The DPRK, in order to put an end to the history of confrontation with the fellow countrymen and open up a new era of peace and prosperity on the peninsula, has refrained from all military actions since early 2018 lest they should get on the nerves of the other party.

Though they had a handshake of “reconciliation and peace”

on the negotiating table, the south Korean authorities have incessantly staged joint military exercises with outside forces targeting the fellow countrymen.

This year alone witnessed lots of their war games. South Korea staged a joint aerial rescue drill codenamed Pacific Thunder with the US in simulation of contingency on the Korean peninsula, a joint military rehearsal in March and a general flight drill for a fortnight from late April by bringing in the US and Australian air forces.

Although the south Korean military argues that the recent rehearsal is a “command post-based training with no involvement of actual forces and movement of equipment” and a “drill for verifying the return of wartime operations control”, it is obvious that it is a dangerous war game for invading the DPRK with a surprise attack and rapid commitment of huge reinforcements.

This notwithstanding, they are uttering absurd remarks against the DPRK about “provocation”

and “responsibility for the consequences”, trying to conceal their insidious intention.

Moreover, they are hell-bent on military buildup.

In an alleged bid to cope with the “north’s existing threat”, they increased the defence budget for 2019 by 8.2 percent as compared to the record-high one of 2018 and, not content with that, have recently submitted to the parliament a defence budget for 2020 which has been raised by 8 percent yet again.

They recently shipped in F-35A stealth fighters, while strategic submarine *USS Oklahoma City* anchored at Pusan Port. They are now pushing the introduction of Global Hawk super-high altitude unmanned reconnaissance plane and trying to complete the deployment of THAAD and deploy new ground-to-ground intermediate-range missiles.

Facts clearly prove who are at the bottom of the military tension on the Korean peninsula.

By Song Jong Ho PT

STATEMENT

FM lashes s. Korea-US joint military exercises

“The south Korean authorities had better keep in mind that even if we are to resume dialogue in future as there is a good current flowing towards dialogue, this dialogue would be held strictly between the DPRK and the US, not between the north and the south,” said Kwon Jong Gun, director of the Department of American Affairs of the DPRK Ministry of Foreign Affairs, in a statement on August 11.

The statement came after the south Korean authorities changed the name of the joint military exercise from its original “Alliance 19-2” to “south Korea-US combined command post exercise in the second half” and announced that they entered the full-scale exercise from August 11.

It is a miscalculation if they think that if they changed the name of the military drill, its aggressive nature would be altered or that we would make it pass off readily, it said.

What cannot be overlooked, it said, is that the Blue House kicked up a fuss about the DPRK’s regular measures to modernize its conventional weapons, calling an “emergency meeting of related ministers” in peacetime when it is not at war.

Even the US president said that our test for developing conventional weapons is a

very small missile test that any countries do, recognizing the DPRK’s self-defensive rights as a sovereign state in fact, it noted, expressing doubt as to why on earth the south Korean authorities dare to call the building of our self-defensive armed forces as an escalated military tension while urging it to stop it.

What is worse is that the south Korean authorities, while defiantly staging an aggressive war game against the DPRK, are running wild on their part in an attempt to tarnish its image, it said. “It is indeed a case of a

thief calling ‘Stop thief!’”

Given that the military exercise clearly puts the DPRK as an enemy in concept, they should think that inter-Korean contact itself will be difficult to be made unless they put an end to such a military exercise, or give a plausible excuse for or a sincere explanation of it, it said.

“We will certainly take this into account and closely watch the movement of the south Korean authorities.”

Compiled from KCNA

FM spokesman fully supports China’s stand on HK issue

It is the DPRK’s principled stand that Hong Kong belongs to China and no country, organization or individual should be allowed to compromise the sovereignty and security of China and the principle of “one country and two systems”, a spokesman for the DPRK Foreign Ministry told KCNA on August 11.

Expressing concern over the ever more undisguised attempts of the foreign forces to destroy the security and order of Hong

Kong and do harm to the lives and properties of its citizens by interfering in the internal affair of China, he opposed and rejected them.

“We fully support the stand and measures taken by the Chinese Party and government to defend its sovereignty, security and territorial integrity and to safeguard the prosperity and stability of Hong Kong,” he said.

Compiled from KCNA

REMEMBRANCE

Leader of Cuban revolution lives on

Fidel Castro Ruz was born in Oriente Province of Cuba on August 13 1926.

Fidel assaulted the Moncada military barracks, one of the points of military importance of the Batista dictatorship in Santiago de Cuba, in July 1953 together with 165 young men and women, kindling the beacon fire of armed struggle and providing a new turning point in the anti-US and anti-dictatorship struggle of the Cuban people. Later, the Cuban revolution developed into an all-people resistance for toppling the Batista dictatorship under his leadership. In January 1959, the Cuban people finally overthrew the pro-US dictatorship and established a revolutionary government in February. With the full support of the Cubans he worked as first secretary of the Central Committee of the Communist Party of Cuba, president of the Council of State and president of the Council of Ministers of Cuba.

He was a prominent statesman who brought about epoch-making changes in Cuba. Despite decades-long sanctions and blockade by hostile forces after

the establishment of socialist system in Cuba, he wisely led the efforts to constantly achieve social progress under the banner of socialism.

The Cuban government and people firmly defended national sovereignty and dignity and the gains of the revolution and made remarkable achievements in different fields of social life under his guidance.

Fidel visited the DPRK in March 1986 to meet President Kim Il Sung and Chairman Kim Jong Il and channelled big efforts into bolstering up bilateral ties of friendship and cooperation.

The DPRK government conferred the title of DPRK Hero and other orders on him in recognition of his devotion.

The traditional ties of friendship and cooperation forged by the preceding leaders of the two countries are steadily carried on at present.

Fidel Castro will live on in the memory of the Korean and Cuban peoples on the road of struggle to achieve common cause.

By Choe Yong Nam PT

TURKEY-US

Allies getting at odds over time

Discord and conflict between Turkey and the United States have been aggravated surrounding the former’s purchase of the Russia-made C-400 anti-aircraft rocket system.

In spite of opposition from the US and the West, Turkey continues to ship in the component parts of the Russian anti-aircraft rocket system.

On July 15 Turkish President Erdogan told a celebration event in Istanbul that the installation of the weapon system already started as scheduled and would finish till April 2020. Turkish service personnel have already been dispatched to Russia to receive necessary training.

According to a Turkish media outlet, the C-400 anti-aircraft rocket system will be deployed near the capital city of Ankara and in the southeastern area near the Syrian border. If it is finished, Turkey will be the first NATO country that has bought the C-400 anti-aircraft rocket system.

The US announced that Turkey would be excluded from the F-35 fighter joint production plan for NATO member nations. On July 17 the White House stated that Ankara’s decision to purchase Russia’s anti-aircraft system has made it impossible for Turkey to continue to join

the plan for joint production of F-35 fighters.

The US insists that C-400 may be used to find out the capacity of F-35 fighters, have a harmful effect on the cooperation capacity between NATO and Turkey and compromise the commitments of all NATO member nations not to buy the Russian weapon system.

The Turkish Foreign Ministry rejected the US decision as an unreasonable and unfounded interference in its foreign policy and judicial system, saying it would inflict irretrievable damage on bilateral relations.

An American expert on Mideast issues said that Turkey will be unable to escape sanctions, but the problem is how severe the sanctions will be and when they will start. A Turkish expert in security issue asserted that in case sanctions begin, bilateral relations will retrogress and it will also adversely affect the cooperation in other fields.

Some analysts estimate that as extreme sanctions may compel Turkey to raise the issue of the US military base in it, the US cannot but mull it over to make a decision.

By Min Chol PT

SOCCER

Hwaepul Cup men's football tournament at its height

The Hwaepul Cup men's football tournament which started on August 1 is running on at different sports grounds in Pyongyang.

Divided into two groups, 12 first-division clubs will play league matches before deciding final rankings through diagonal and direct matches.

The tournament is drawing the special attention of enthusiasts as it is held between first-division clubs before the 2022 World Cup regional qualifiers.

"The interest in Group B grows more as it consists of local powers which got good results in the previous games," a fan said after the announcement of draw results for group matches.

There is no significant difference in their abilities since Kigwancha is noted for diverse tactical change, Hwaepul for good cooperation and Sobaeksu for good physical and technical preparedness.

The group also involves Pyongyang and Rimyongsu that are noted for making remarkable progress in recent years.

Amid the divergent predictions about the clubs to be advanced to the semi-finals in the group, there



JON KWANG HUN / THE PYONGYANG TIMES

A scene from the match between Pyongyang and Sobaeksu for the Hwaepul Cup men's football tournament.

was a match between Sobaeksu and Pyongyang on August 12 at Sosan Football Stadium on Chongchun Street in Pyongyang.

It was the second match for both clubs, with the former recording three points and the latter none.

This year, the two clubs played five matches, in which Sobaeksu beat Pyongyang four times.

Most spectators predicted that the match would end in favour of Sobaeksu as the club goes four places ahead of Pyongyang in the ongoing premier league matches.

However, Pyongyang opened the scoring.

Though Sobaeksu scored an equalizer in the 53rd minute, it allowed another loss one minute before the close of extra time of the second half and the match ended 2-1 in favour of Pyongyang.

"Dominance in terms of attack number and ball possession is not prerequisite to victory. Even a single sudden attack is enough to turn the tables in football matches," said Kim Chol Jin, Pyongyang's defender.

By Jong Tang Song PT

CUSTOM

Stone sauna and sand bath of Kaesong

It is the hottest period when everybody tries to mitigate the heat.

As fire is put out by fire, many people remove the heat of their bodies through steam or sand bath.

Sauna promotes blood circulation of internal organs, improves nutrition and helps excrete many toxic substances and metabolites, which are harmful to human body, through sweat. It also enhances the function of some endocrine glands and that of autonomic nervous system control.

The Korean ancestors liked to have a sauna, and stone sauna in Kaesong was well known.

The stone sauna is a way of taking a steam bath in a heated arch-type furnace built with stones.

Locals in Kaesong would heat the furnace by burning pine to have a stone sauna and after heating they would put green pine twigs in the furnace so that the steam of resin could permeate the human airway and all sweat pores on the skin.

Samdaem sand bath was also renowned for removing the heat with heat.

It means a sand bath at the Samdaem brook in the eastern

suburbs of Kaesong. The locals have a long-standing custom of applying hot sand in the brook to their whole body in the hottest season. The method reportedly started by the court ladies of Manwoltae, the royal palace of Koryo which existed between 918 and 1392.

The sand contains plenty of magnesium, iron, copper, silicon, manganese, calcium and other elements. And the water of the brook has various elements including carbonate and magnesium.

The sand bath is good not only for improving the resistance of the body but also for curing rheumatoid arthritis, neuralgia, neuritis, bruise, sequela of surgical operations, cholelithiasis, nephrolithiasis, convulsions, paralysis, chronic diseases, athlete's foot and dermatitis.

It can be taken once or more a day for 15 to 30 minutes.

Many stories about its treatment efficacy are told, including a tale of a man who cured neuroparalysis after the sand bath, and one can be free from cold in the year if he or she has a sand bath.

By Kim Rye Yong PT

ARCHAEOLOGY

Relics from later Palaeolithic Age discovered

Lecturers and researchers of the History Faculty of Kim Il Sung University and researchers of the Archaeology Institute of the Academy of Social Sciences have unearthed old hunting and stoneware-making sites from the later period of the Palaeolithic Age (50 000-15 000 years ago) in the area of Siphung-ri, Sukchon County, South Phyongan Province, in the middle part of the country, before discovering a site from the same age in the Ryesong River basin.

The relics found in Sukchon included more than 460 pieces of animal bone fossils, over 10 bone tools, some 20 stone implements and over 1 200 semi-finished stone tools.

Experts have confirmed through different analyses and evaluation including the ESR date measurement that the formation of the relics dates back over 15 700 years.

Scholars assert that the Siphung-ri site, which helps understand the activities of those who hunted animals in the flat areas, is an invaluable historical one showing the continuity of the Palaeolithic Age and the Neolithic Age.

Archaeologists found out a valuable natural cave in Sajong-ri, Singye County, North Hwanghae Province, and conducted a full-scale excavation of it.

In the course of this, they discovered large numbers of

remains in the Palaeolithic Age including five stone implements in three kinds, three bone tools and 732 bone fossils of mammals in 17 kinds.

They demonstrated that the natural cave site in Sajong-ri belongs to the later period of the Palaeolithic Age by conducting an archaeological research into a pusher, one of stone tools which was widely used after its emergence in the later period of the Palaeolithic Age, and making a paleontological analysis of extinct animals.

According to researchers, the relics and remains are of great importance in proving that the Korean ancestors had created human culture in a vast area including the basins of the Taedong and Ryesong rivers in the Palaeolithic Age and the culture of the Neolithic Age came into being independently on this land by the Korean nation.

By Ri Sung Ik PT



Relics from the later period of the Palaeolithic Age unearthed in the Ryesong River basin.

FOOD

Jelly favoured by Koreans

Jelly is a favourite national food of the Korean people.

Jelly is made by grinding mung bean or corn and settling their dregs or dissolving starch powder in water and then cooling it at about 90 degrees centigrade while gently churning. At this time too much or strong churning makes jelly lose stickiness. The quality of jelly changes according to the size of starch particle, temperature, sort and purity of starch, cooling speed, intensity of mechanical action applied when making jelly and water/starch ratio.

From ancient times the Koreans have liked to eat mung bean jelly in spring or early summer, tadpole jelly in summer and buckwheat and acorn jellies in autumn.

Mung bean jelly has been regarded as the best of all jellies, with the one made from yellow mung bean called "yellow mung bean jelly" and the one made of



CHAE MYONG RIM / THE PYONGYANG TIMES

Sliced transparent jelly made by boiling cattle hooves.

green mung bean, "green gram jelly".

Jelly was also mixed with various other cooking materials to make jelly dishes like salad or cold soup.

According to old book *Tongguksesigi* published in the first half of the 19th century, roast minced beef, seasoned parsley and laver were mixed with sliced mung bean jelly and soy sauce and vinegar added to it to make mung bean jelly salad.

Everyone likes to eat jelly as it is easy to prepare, digestible and tasty.

By Jong Chol PT

